

The Role of Workforce Research in Medical Education and Patient Access



David Schmitz, M.D.

Associate Director of Rural Family Medicine
Family Medicine Residency of Idaho

The Role of Workforce Research in Medical Education and Patient Access

- Background: Asking the right questions
- Information: How it is used
- Education: Changing to right behaviors
- Motivation: Growing good doctors
- Transformation: Building a system



Idaho Family Physician Rural Workforce Assessment Study

David Schmitz, M.D.

Associate Director of Rural Family Medicine
Family Medicine Residency of Idaho

Ed Baker, Ph.D.

Director, Center for Health Policy
Boise State University



Presentation Overview

- Acknowledgements
- Background
- Study Design
- Selected Findings
- Discussion
- Next Steps
- Questions



Research Acknowledgements

- Contributors/Affiliations

- Steven Millard, President, Idaho Hospital Association
- Neva Santos, Executive Director, Idaho Academy of Family Physicians, Inc.

- Funding

- Mary Sheridan, Supervisor, Office of Rural Health and Primary Care, Idaho Department of Health and Welfare through a federal grant from the U.S. Department of Health and Human Services, Health Resources and Services Administration.
- In-kind contributions by Boise State University, Family Medicine Residency of Idaho, Inc., Idaho Hospital Association and Idaho Academy of Family Physicians, Inc.



Background

- American Academy of Family Physicians report in September of 2006 suggested Idaho would experience a serious shortage of Family Medicine physicians by 2020
 - Population growth
 - Increase in elderly citizens
- Idaho Legislature/State Board of Education report on graduate medical education in Idaho in 2007 found access to physicians is “extremely” limited in Idaho and Idaho ranks high in the number of physician age 55 and older.
 - Recommended Idaho increase its physician work force to the median level of the 50 states
 - Would require a 42% increase at current population levels
 - Projected population growth, demographic changes and retirement trends will require an even higher increase
- Rural areas disproportionately underserved - one study indicated that 20% of population resides in rural areas served by only 9% of practicing physicians



Study Design

- General research focus
 - To identify work force factors influencing recruitment and retention of Family Medicine physicians in rural Idaho.
- Specific areas of focus for Phase I
 - General demographic
 - Work load
 - Scope of practice
 - Information technology utilization
 - Satisfaction



Study Design

- Survey research
 - Hospital Administrator Survey
 - Rural Family Medicine Physician Survey
- Survey content validity performed by practicing Family Medicine physicians and representatives of the Idaho Hospital Association
- Surveys administered by the Idaho Hospital Association and the Idaho Academy of Family Physicians
- Target populations for surveys were located in Idaho counties of less than 50,000 persons



Study Design

- Response rates
 - Hospital Administrator Survey = 67.9% (19/28)
 - Rural Family Medicine Physician Survey = 37.1% (92/248)
- Research limitations
 - Survey respondents may not represent the entire eligible respondent class
 - Some sample sizes were small and may have yielded limited statistical power to detect differences between groups



Selected Findings: Hospital Administrator Survey

- 18/18 (100%) of facilities would support educational opportunities for medical students and/or residents at their facilities



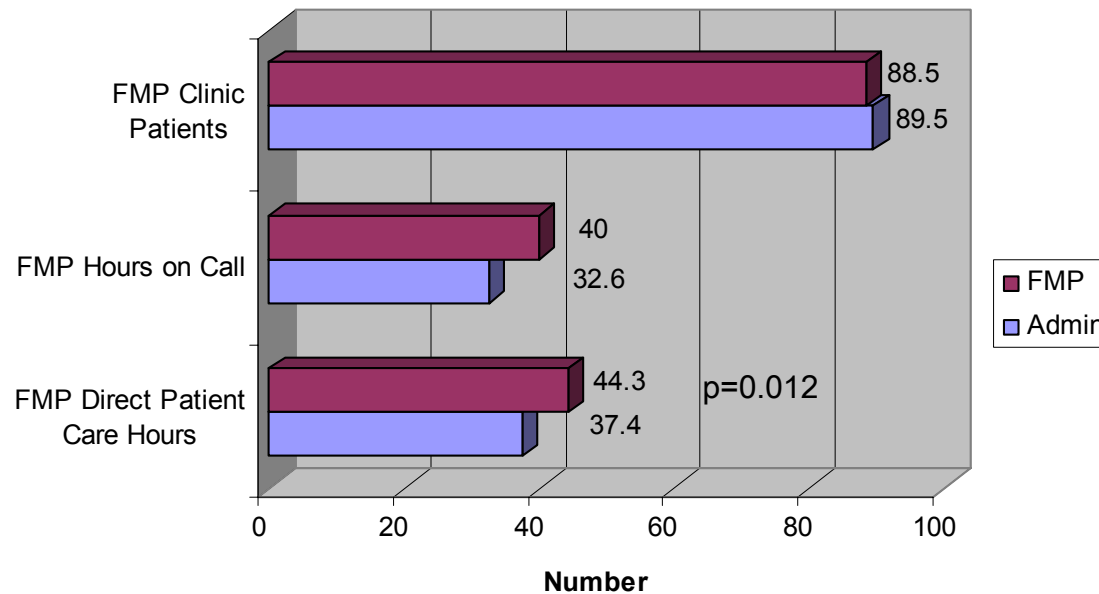
Selected Findings: Rural Family Medicine Physician Survey

- Demographics
 - Average age: 47.2
 - Gender distribution: 23.1% Female
 - Average years in practice post residency: 16.0
 - Medical school/residency training in Idaho: 33.7%
 - Plan to maintain board certification: 89.7%
 - Encourage medical students/residents to enter rural Family Medicine: 88.4%

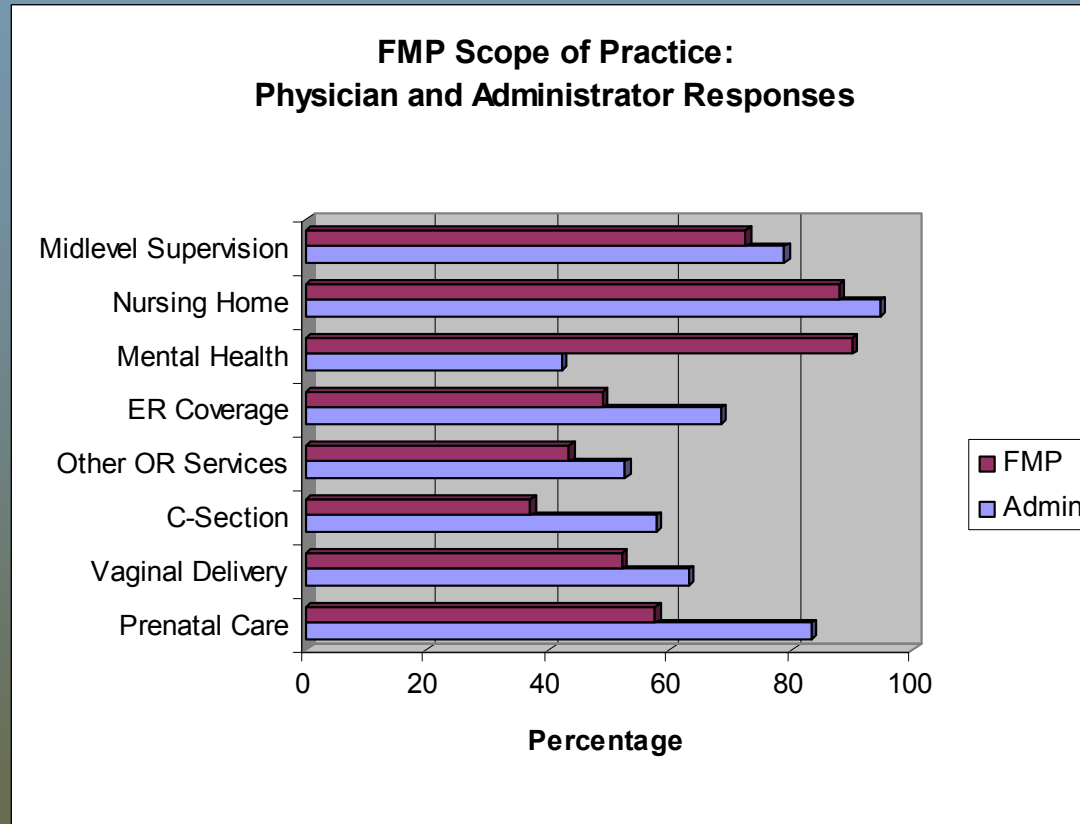


Selected Findings: Rural Family Medicine Physician Survey

**Family Medicine Physician (FMP) Weekly Work Load:
Physician (Actual) and Administrator (Expected) Responses**

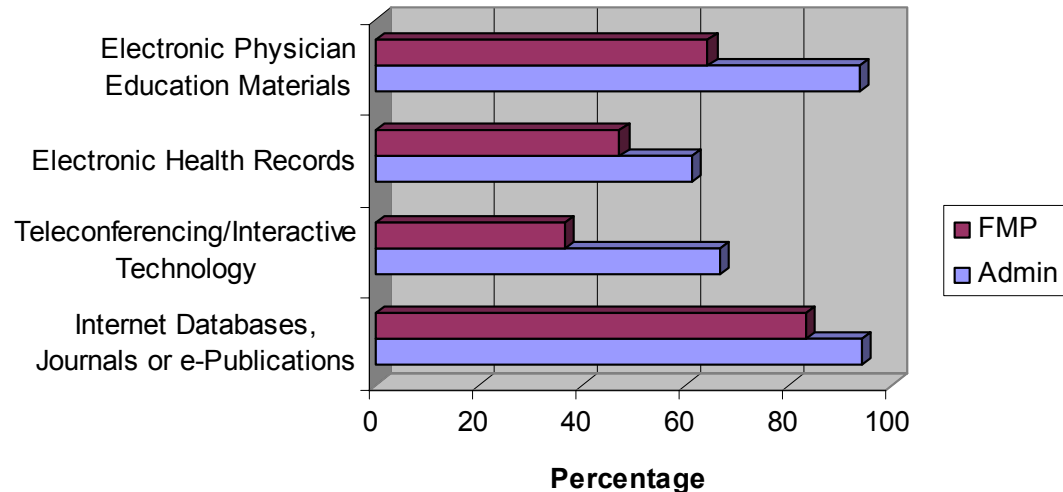


Selected Findings: Rural Family Medicine Physician Survey

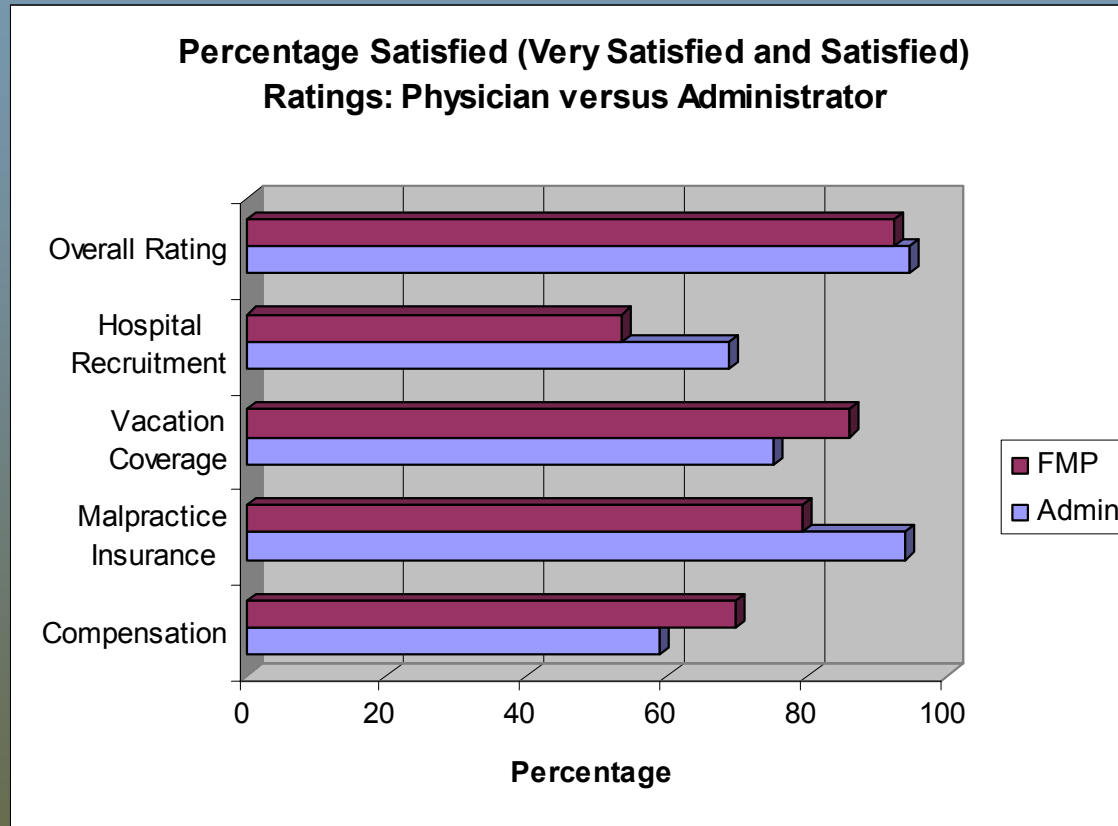


Selected Findings: Rural Family Medicine Physician Survey

**FMP Use of Technology:
Physician and Administrator Responses**



Selected Findings: Rural Family Medicine Physician Survey



Selected Findings: Rural Family Medicine Physician Survey

- Selected statistically significant FMP gender differences
 - Female respondents younger and more likely to be employed
 - Female respondents less likely to provide OR services or to provide EGD or colonoscopy
 - Female respondents are more likely to use internet databases, journals and e-publications as well as to use electronic physician education materials



Selected Findings: Rural Family Medicine Physician Survey

- Selected statistically significant FMP age group differences
 - 30-48 age group more likely to have service obligation or loan repayment at their current site
 - 30-48 age group more likely to provide prenatal care, vaginal delivery and inpatient admissions
 - 30-48 age group more likely to have medical school/residency training in Idaho



Selected Findings: Rural Family Medicine Physician Survey

- Selected statistically significant FMP employment status differences
 - Employed respondents are younger and more likely to be female
 - Employed respondents are more likely to have service obligation or loan repayment opportunities
 - Employed respondents are more likely to offer prenatal care, ER coverage and to supervise midlevel care



Discussion

- Recruitment and retention challenges do not appear to be uniform across Idaho rural hospitals
- Rural Idaho hospitals
 - Utilize a broadly trained Family Medicine physician work force
 - Integrate electronic education and clinical capabilities
 - Report high levels of satisfaction with recruitment and retention issues



Discussion

- Idaho practicing rural Family Medicine physicians
 - Provide clinical services across a wide variety of practice domains
 - Use technology to improve their performance and education
 - Report high levels of satisfaction across critical areas related to recruitment and retention but are somewhat concerned about the ability of rural hospitals to recruit qualified Family Medicine physicians
- Gender, age and employment status are important characteristics for rural Family Medicine physician recruitment and retention efforts



Next Steps

- Phase II - Characteristics of Rural Medical Communities: The “Community Apgar Score”
 - Integration of outpatient and hospital-based medical services
 - Economic support structures
 - Specialty and subspecialty relationships
 - Tertiary center referral and support patterns
 - EMS support and organization
 - Community base
- Phase III - Characteristics of Satisfied Physicians
 - Survey of currently practicing physicians
 - Onsite interviews
 - Correlations with Medical Communities and Patient Satisfaction



Questions ?



**Collaborative Rural Research Addresses Access and Education in Idaho
Rural Roads Summer 2008 Article:**

<http://www.ruralhealthweb.org/go/left/publications-and-news/rural-roads>

Idaho Family Physician Rural Workforce Study:

<http://www.healthandwelfare.idaho.gov/site/3459/default.aspx>

Community Apgar Questionnaire:

<http://www.healthandwelfare.idaho.gov/site/3459/default.aspx>